STATE OF MARYLAND

DHMH

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May 23, 2008
Public Health & Emergency Preparedness Bulletin: # 2008:20
Reporting for the week ending 05/17/08 (MMWR Week #20)

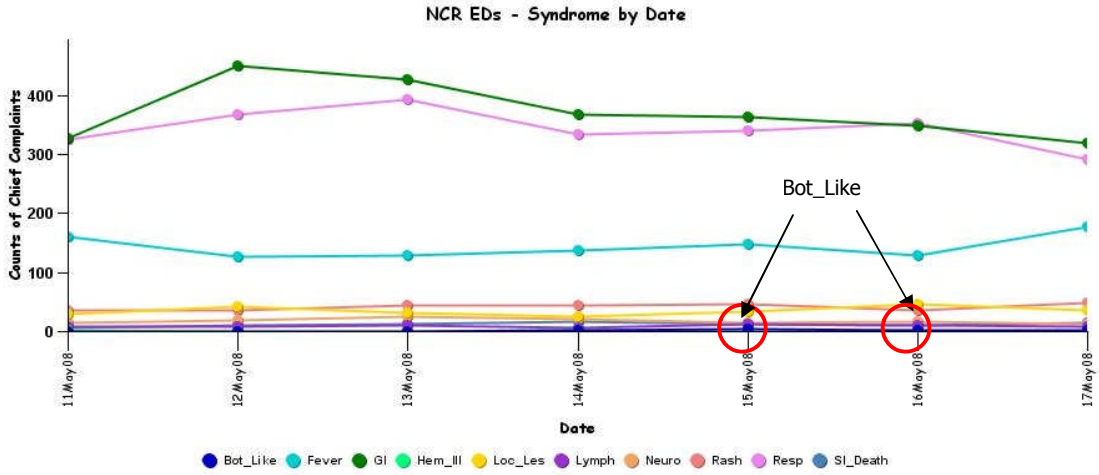
CURRENT HOMELAND SECURITY THREAT LEVELS

National: **Yellow (ELEVATED) *The threat level in the airline sector is Orange (HIGH)**
Maryland: **Yellow (ELEVATED)**

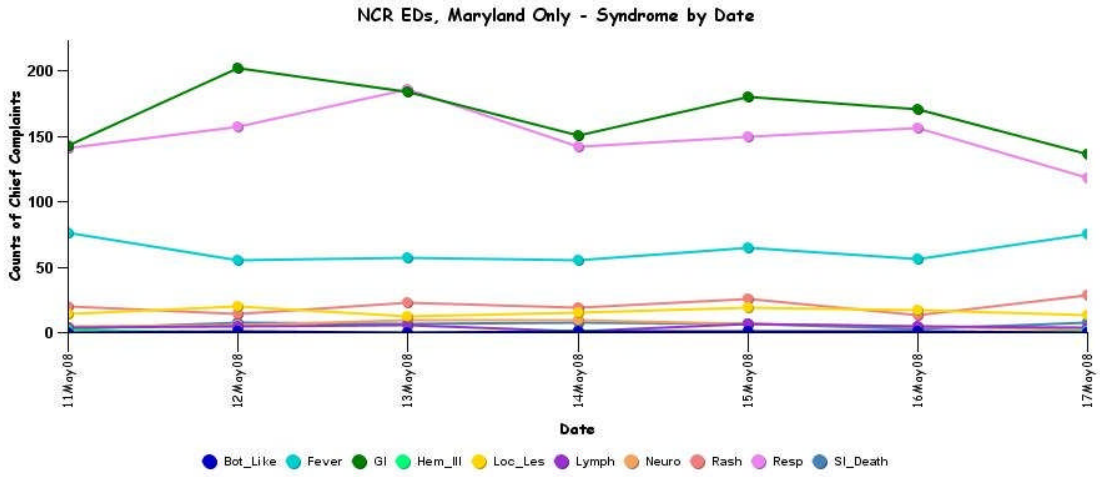
SYNDROMIC SURVEILLANCE REPORTS

ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):
Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts only. Note: ESSENCE – ANCR Spring 2006 (v 1.3) now uses syndrome categories consistent with CDC definitions.

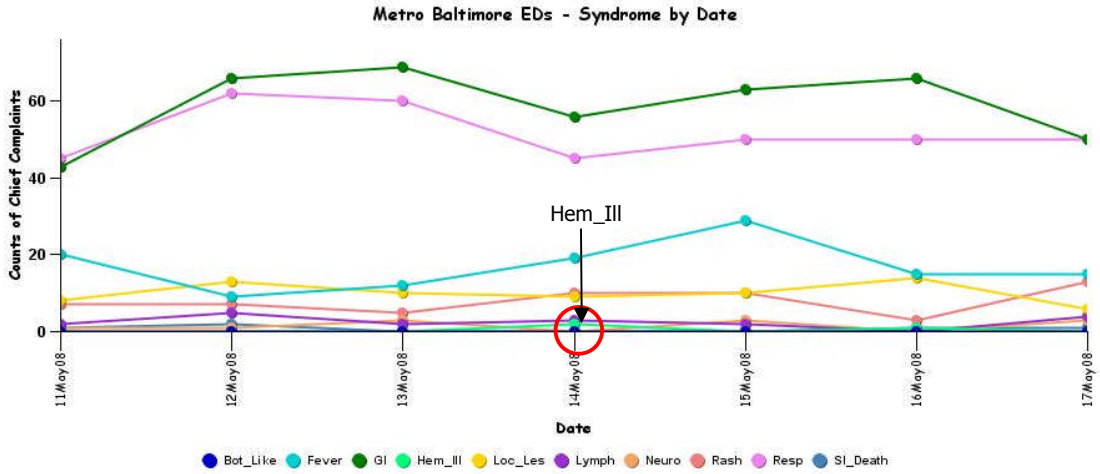
Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.



* Includes EDs in all jurisdictions in the NCR (MD, VA, DC) under surveillance in the ESSENCE system

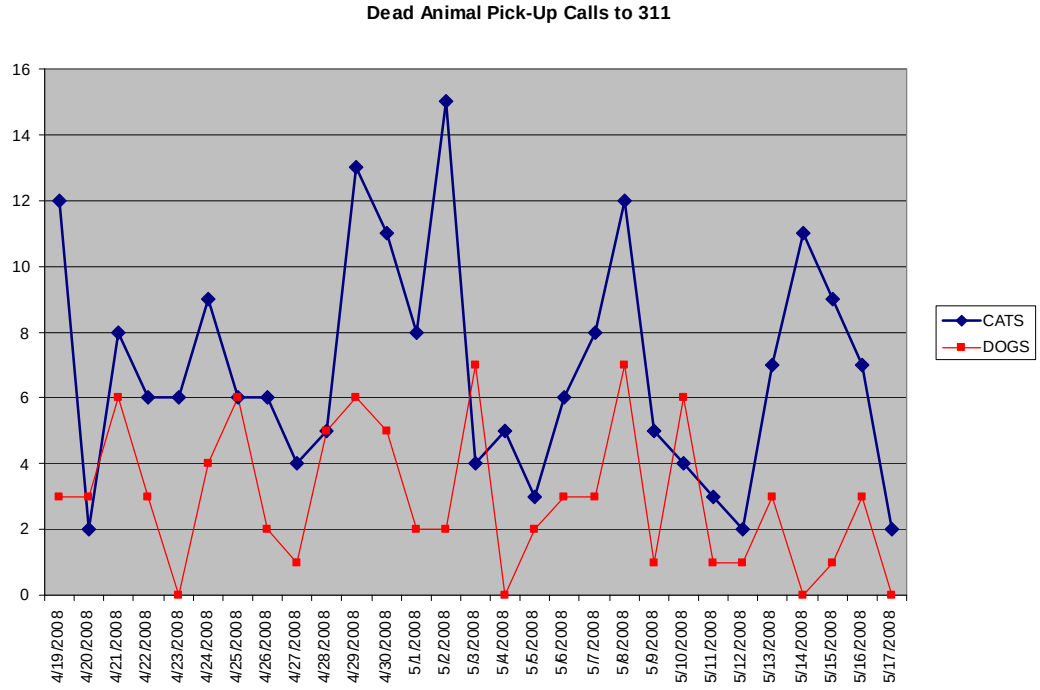


* Includes only Maryland EDs in the NCR (Prince George's and Montgomery Counties) under surveillance in the ESSENCE system



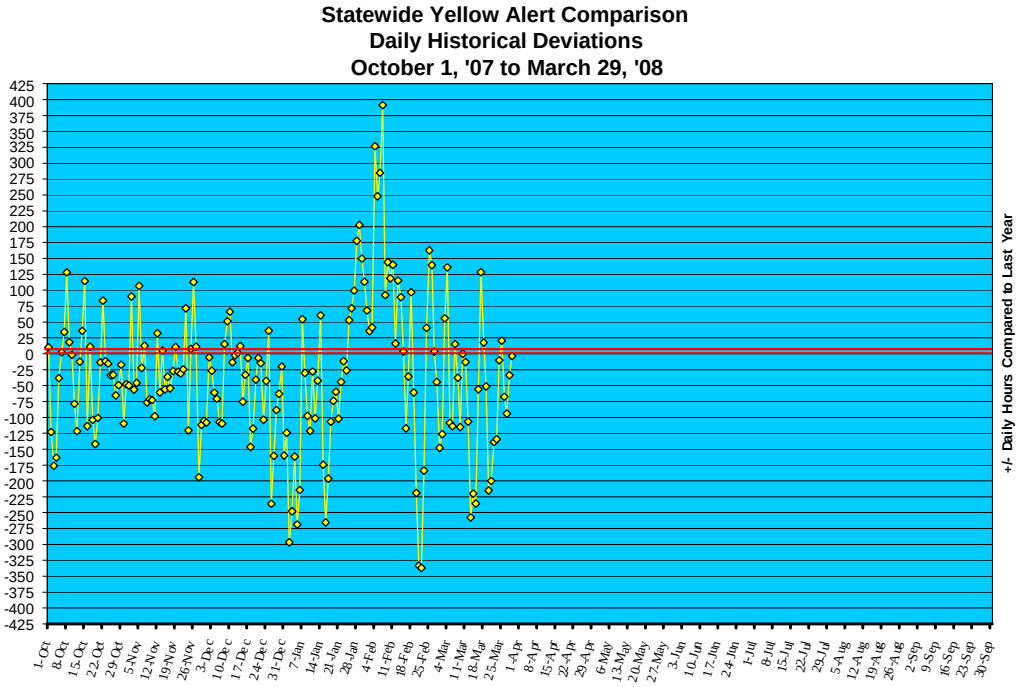
* Includes EDs in the Metro Baltimore region (Baltimore City and Baltimore County) under surveillance in the ESSENCE system.

BALTIMORE CITY SYNDROMIC SURVEILLANCE PROJECT: No suspicious patterns in the medic calls, ED Syndromic Surveillance and the animal carcass surveillance. Graphical representation is provided for animal carcass surveillance 311 data.



REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/06.
*Note: No new data available at this time.



REVIEW OF MORTALITY REPORTS

Office of the Chief Medical Examiner: OCME reports no suspicious deaths related to BT for the week.

MARYLAND TOXIDROMIC SURVEILLANCE

Poison Control Surveillance Monthly Update: Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in April 2008 did not identify any cases of possible terrorism events.

REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:	**Aseptic**	**Meningococcal**
New cases (May 11 - 17, 2008):	8	2
Prior week (May 4 - 10, 2008):	12	1
Week#20, 2007 (May 12 - 18, 2007):	14	1

OUTBREAKS: 2 outbreaks were reported to DHMH during MMWR Week 20 (May 11-May 17, 2008):

1 Gastroenteritis outbreak
1 outbreak of GASTROENTERITIS associated with a Hotel

1 Rash illness outbreak
1 outbreak of RASH ILLNESS associated with a Nursing Home

MARYLAND SEASONAL FLU STATUS:

Seasonal Influenza reporting occurs October through May. For MMWR Week 19, Maryland's influenza activity level was NO ACTIVITY. To date this season, there have been 3638 lab confirmed influenza cases in Maryland. ** Note: MMWR Week 20 information not available at this time.

SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS:

Graph shows the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. This graph does not represent confirmed influenza.

PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO Pandemic Influenza Phase: Phase 3/4: No or very little human-to-human transmission/Small clusters with limited human-to-human transmission, suggesting that the virus is not well adapted to humans

US Pandemic Influenza Stage: Stage 0/1: New domestic animal outbreak in at-risk country/Suspected human outbreak overseas

*More information regarding WHO Pandemic Influenza Phase and US Pandemic Influenza Stage can be found at: http://bioterrorism.dhmh.state.md.us/flu.htm

WHO update: As of April 30, 2008, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 382, of which 241 have been fatal. Thus, the case fatality rate for human H5N1 is about 63%.

AVIAN INFLUENZA (India): 12 May 2008, Amidst a slow culling operation in avian flu-affected Darjeeling district due to non-cooperation by owners of fowl, a fresh report of bird deaths worsened the situation. District magistrate Rajesh Pandey said on May 12 that the deadline was extended till tomorrow, as only 9,500 birds were culled against the target of culling 18,000 birds by May 11. Animal Resources Development department sources said that the progress of culling was not as expected because of non-cooperation by poultry owners in some areas. The target was now increased to 20,000 and was expected to be completed by May 13, the sources said. To encourage poultry owners, the department announced revised compensation for birds culled. The situation, however, turned worse following reports of the deaths of a crow, 2 swallows and 7 fowl from Bijanbari area in Darjeeling on May 11. Unofficial reports, however, claimed the deaths of 100 birds. The outbreak of avian influenza at Bagdogra, Matigara, Naxalbari in Siliguri and Sukna in Kurseong sub-division was confirmed by High Security Animal Disease Laboratory, Bhopal. The administration has banned trading on chicken and poultry products in the affected areas. Meanwhile, there were allegations that the administration, under pressure from the business community, was not banning the sale of poultry products in this commercial hub. The relaxation could cause problems, as there was every possibility that a supply of chickens and poultry products could come from the affected areas, which were within 15 km of this town.

AVIAN INFLUENZA, HUMAN, SUSPECTED (Indonesia): 14 May 2008, Two teenagers from the same family have died within 10 days because of suspected bird flu in Jakarta, prompting health officials to take blood test of the other members of the family, local press said on Wednesday May 14. A 16 year old girl died 4 days after being admitted to the Persahabatan Hospital in the Indonesian capital on May 8 with laboratory test later confirming she had the avian flu virus. She had been treated at the isolated room exclusively for bird flu patients but doctors failed to save her life, reported a leading news website. Ten days before her death, her 15 year old brother died after a brief treatment at another hospital with symptoms similar to bird flu. "The symptoms were just the same: high fever, cough and faint. We thought it was the seasonal flu so he didn't stay at the hospital, but then he died," the father of the ill-fated teenagers, said. But it cannot be confirmed that bird flu had caused the boy's death as he didn't take a blood test. The family live in a densely populated neighborhood where a nearby house rears chickens.

AVIAN INFLUENZA (South Korea): 15 May 2008, South Korean officials said on Monday May 12 that they have killed all poultry in Seoul, the capital, to curb the spread of bird flu following a new outbreak of the disease in the city. Quarantine officials destroyed 15,000 chickens, ducks, pheasants, and turkeys raised in farms, restaurants, schools, and homes in the capital, said Kim Yoon-kyu, a Seoul Metropolitan Government official. The Seoul government said the slaughter was necessary to contain the disease. It said it will now focus on preventing live poultry from being brought into the capital. The slaughter began Sunday night, hours after authorities confirmed Seoul's second outbreak of bird flu in less than a week. The slaughter did not affect parrots, parakeets, and canaries because they have little chance of spreading the disease, Kim said. On Monday night, government tests confirmed the latest outbreak in Seoul was caused by the deadly H5N1 virus, said Yoon Young-ku, a spokesman at the Agriculture Ministry. The tests also confirmed 2 additional outbreaks of the virus in Busan, bringing to 31 the total number of outbreaks in South Korea, he said. Bird flu began sweeping southern parts of the country last month for the first time in more than a year, forcing the slaughter of about 6.8 million birds.

NATIONAL DISEASE REPORTS:

HANTAVIRUS (Colorado): 12 May 2008, Rural residents received a warning on May 7 when Fremont County public health officials announced the first local case of hantavirus, which is fatal in nearly half of all cases. A Kiowa County, Colorado resident died from the disease in February. The virus is carried in the saliva, urine, and droppings of deer mice, which are found in rural areas and pose a significant risk when residents perform spring cleaning and open up cabins, buildings, sheds, and barns. "Before people begin cleaning out building structures that have been closed up all winter, they need to take precautions," said Clarice Little, Fremont County public health administrator, "particularly if there are accumulations of mouse droppings and other signs of mice." Infection occurs when the virus becomes airborne and is

inhaled, or by direct contact with rodents, their droppings, or nests. Little said the disease cannot be transmitted from person to person. Hantavirus infection begins with high fever, severe body aches, a headache, and vomiting 1-6 weeks after exposure. Initially, there are no respiratory symptoms present; however, Little said within 1-5 days, the illness quickly progresses to respiratory distress, including a cough and difficulty breathing, while the lungs fill with fluid. No effective treatment exists for the disease, Little said, so prevention is the key to avoiding hantavirus infection. "When hantavirus infection is suspected or confirmed, early admission to a hospital where careful monitoring, treatment of symptoms, and supportive therapy can be provided is most important," Little said. (Emerging Infectious Diseases are listed in Category C on the CDC list of Critical Biological Agents) *Non-suspect case

INTERNATIONAL DISEASE REPORTS:

CRIMEAN-CONGO HEMORRHAGIC FEVER (Turkey): 11 May 2008, A woman from the Central Anatolian province of Sivas died on Thursday May 8 at an Ankara hospital where she was being treated for Crimean-Congo hemorrhagic fever, a viral disease contracted from a tick bite which can be fatal. The woman, who herself had removed the tick that bit her 10 days ago as she grazed her cattle, died on May 8 at Ankara Numune Hospital, where she had been transferred from a Karabuk provincial hospital that she initially checked into after falling ill a few days after the bite. Meanwhile, in the Central Anatolian city of Sivas, 10 children with tick bites were taken to the Sivas State Hospital in the past 2 days. The ticks on the children's bodies were removed by medical staff at the hospital. One of the children's tick bites was noticed by the child's teacher, who immediately notified the parents. Their hospitalization follows that of 6 other children, also taken to the hospital in Sivas on Wednesday May 7 with symptoms of Crimean-Congo hemorrhagic fever. Officials at the Sivas State Hospital repeated their warning against trying to remove a tick from the body oneself, advising instead that people go to the nearest hospital or clinic for medical staff to remove the tick. In the past 5 years, 94 people have died in Turkey of Crimean-Congo hemorrhagic fever. Turkish Clinical Microbiology and Infectious Disease Foundation (KLIMIK) President Haluk Eraksoy pointed out that ticks become active in spring and summer, so necessary measures should be taken now. As to the reason why tick bite cases have surged in recent years, Eraksoy said: "Some put the blame on global warming or environmental pollution. Some suggest that the ticks are carried by migratory birds to Turkey. Yet, there is no generally accepted explanation for its origins." (Viral hemorrhagic fevers are listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

MELIOIDOSIS, CAPRINE (Australia): 14 May 2008, Hundreds of feral and domestic goats have been dying from disease on breeding blocks near Katherine in the Northern Territory of Australia. The harsh weather conditions and the recent transport of more goats to the region are believed to be causing the common diseases. Vet officer Sue Fitzpatrick says the goats were having trouble urinating and showing signs of depression. "The problems with goats haven't changed in the past years, it's just that we're seeing an increase in the number of goats," she said. "The most common problem is worms, secondly melioidosis is an ongoing problem particularly in the Top End, iron wood toxicity and there are also problems associated with transport of goats up to the region and with kidding as well." Melioidosis is an infectious disease caused by the bacterium Burkholderia pseudomallei. The bacteria causing melioidosis are found in contaminated water and soil and are spread to humans and animals through direct contact with the contaminated source. (Melioidosis is listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

CRIMEAN-CONGO HEMORRHAGIC FEVER (Russia): 15 May 2008, The administration of Rospotrebnadzor (Federal Trade and Public Health Inspection Authority) for Stavropol Krai considers that the Crimean-Congo hemorrhagic fever (CCHF) situation in the region is serious. One patient died on Tuesday May 13. The agency reports that so far there are 9 other patients with CCHF registered this year. These patients are from 8 regions of the Stavropol Krai. Only 3 patients were registered during the same period last year. (Viral hemorrhagic fevers are listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

BOTULISM (Russia): 16 May 2008, The administration of Rospotrebnadzor (Territorial Directorate of the Federal Services for Consumer Protection and Human Welfare) for Rostov region oblast reports that the epidemic situation is alarming in the region due to many cases of foodborne botulism. There were 24 botulism cases in the region in 2006 and 5 of them died. The numbers for 2007 are 24 affected people including one fatal case. The numbers for 2008 so far are 12 cases and 2 deaths. The last cases were in the Morozowsk settlement in April 2008. Two people fell sick after eating dried bream. The last outbreak was in the city of Belaya Kalitwa, where 3 people got sick and 2 of them died. Rospotrebnadzor reports that the most common food that causes botulism is homemade products like dried fish, mushroom marinades, and vegetable cans. These dangerous goods are also sold in local non-authorized markets. The testing of food specimens taken from cases revealed botulinum toxin in 70-75 % of cases and the producing organism in 10-30 % of cases. The epidemiological analysis showed that the most risk for botulism is coming from homemade products for self-use and from the same products sold in non-authorized markets. (Botulism is listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

HANTAVIRUS (Canada): 17 May 2008, Chinook Health recently announced the first case of hantavirus has been confirmed in this region, although since 1989, 28 cases throughout Alberta have been reported. In a press release issued by Chinook Health, Dr Vanessa Maclean, acting medical officer of health, says given the largely rural population, the potential for someone to contract the virus is always a possibility. Maclean adds the individual has since recovered, but the public needs to remain cautious, as the virus can be aggressive and has a fatality rate of 30 per cent. Contracted

primarily when an individual inhales rodent urine and feces, Chinook Health says it's important to not disturb contaminated dry materials. "Any time people are working in areas inhabited by mice they need to be extra cautious," says Maclean. The affected individual contracted the virus when cleaning out a barn. Chinook Health says the most effective precaution against infection is to keep rodents out of homes and work areas. Chinook Health states those exposed to the virus usually exhibit symptoms of hantavirus pulmonary syndrome 1-3 weeks after coming into contact with contaminated droppings. Dr Maclean says the symptoms initially appear flu-like and progress quickly. "Within a 72 hour period, a previously healthy person may require hospitalization and quite often aggressive management in an ICU setting," says Maclean. The only confirmed carrier of the hantavirus in Alberta is the deer mouse, but Chinook Health says all rodents should be treated as potential carriers. Chinook Health notes there is no evidence of person-to-person spread of the virus in North America. (Emerging Infectious Diseases are listed in Category C on the CDC list of Critical Biological Agents) *Non-suspect case

OTHER RESOURCES AND ARTICLES OF INTEREST:

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://bioterrorism.dhmh.state.md.us/

Multistate Outbreak of Human *Salmonella* Infections Caused by Contaminated Dry Dog Food - United States, 2006-2007 MMWR 57(19); 521-524. May 16, 2008.
This report summarizes a multistate outbreak investigation of Salmonella Schwarzengrund infections associated with contaminated dry dog food from January 2006 – December 2007. There were a total of 70 human cases reported to CDC PulseNet from 19 states. This was the first investigation to identify contaminated dry dog food as a source of human Salmonella infections. (http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5719a4.htm)

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NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail me. If you have information that is pertinent to this notification process, please send it to me to be included in the routine report.

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